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ECONOMIC

SUBSIDIZING POLICY FOR BIG ENTERPRISES DISCUSSED

Tokyo ZENEI in Japanese Jan 83 pp 98-107

[Article by Takashi Yamaguchi, Professor, Meiji University: "Subsidizing Policy in Favor of Big Enterprises"]

[Text] 1. Many-Sided Preferential Measures for Big Enterprises

I report on the "subsidizing policy in favor of big enterprises." The reason I do not treat this theme as "grants-in-aid" is because I believe the Liberal Democratic Party government's preferential measures for big enterprises are too many-sided to be included within the narrow confines of grants-in-aid. The preferential measures for big enterprises are many-sided indeed but I believe they can be classified into six categories.

(1) The Procurement of Funds

First, it is the preferential measures for big enterprises in terms of their procurement of capital funds. Under the Liberal Democratic Party government have been put in place systems particularly centered around the Commercial Law, and the Securities and Exchange Law, systems which are aimed at aiding and favoring big enterprises in procuring funds at a low cost.

As you know, the new Commercial Law, which was put into effect as of 1 October 1982, governs the management of enterprises at present. Even medium and small enterprises without exception take the form of joint-stock company, but this system is very advantageous to big enterprises. It is believed that a joint-stock company is one which by nature procures its funds by issuing large numbers of shares of stock or bonds on the securities market. It goes without saying at the same time that it [the joint-stock company] is usually a monopolistic big enterprise which does so.

In such procurement of capital issuing additional shares of stock at market prices is widely practiced, and there are a few typical enterprises which have made a huge profit by such method. For example, Toyota Motor Corp has on several occasions issued additional shares of stock at market prices, shares which for the most part were ex dividend. In August 1981, the corporation issued 70 million additional shares, face value 50 yen each, at the then market price of 1,450 yen per share, which means that by this

transaction alone the corporation earned 95.55 billion yen as a premium. This money is shown under the heading of capital reserve, separate from the joint-stock capital. In a country like the United States, dividends are paid at so many percent of the market value of the share, but in Japan, additional shares are issued at prevailing market prices but when it comes to paying dividends, they are paid at some many percent of the face value of the share, so it is possible to procure capital at a very cheap cost. The current market price of this corporation's share is 937 yen, a fall of 478 yen in value, which means that the people who bought the shares at that time have lost a total of 33.46 billion yen. In other words. the Commercial Law broadly recognizes the system whereby a corporation procures a large fund at a cheap cost for capital even as it inflicts losses on its stockholders. Except that, in light of criticism from the monetary and insurance circles within the financial community over such excessive profits, a change was made in the law as of 1 October that in future issuance of additional shares of stock at market prices, no more than one-half of the profits can be treated as a premium (capital reserve).

Furthermore, typical among big enterprises which cannot issue additional shares of stock at market prices are electric, gas, iron and steel corporations, but such corporations issue bonds. However, under the old Commercial Law a corporation was specifically prohibited from issuing bonds in excess of the total of its capital and reserves. Keidanren [Federation of Economic Organizations] had as a matter of urgency pressed for lifting altogether the limit on such issuance or increasing the limit. Prior to the amendment of the old Commercial Law, Keidanren, as matters of top priority, had forced the passage of a special law and an interim law, making it possible for a corporation to issue bonds to an amount twice the total of its capital and reserves.

The greatest anxiety of Japan's export industries such as electrical equipment, iron and steel, shipbuilding, and precision machines had been the fear of incurring large losses stemming from so-called cheap yen exchange rate. In a move to cope with this exchange loss (exchange hedge), what Keidanren had put forward as a priority matter was warrant bonds. These are bonds convertible to shares, bonds promising a reward that the buyer would be able to buy a certain number of shares of the corporation concerned at a certain price, bonds which are familiar overseas. [Keidanren forced] the issuance of warrant bonds to be incorporated in the provisions of the new Commercial Law on the grounds that in issuing bonds overseas, it would be easier to procure capital if the bonds were convertible to shares. Now that with the provision in place the export industris will be able to earn creadits in dollars on the one hand and incur dollar debts on the other, by the issuance of warrant bonds, they will be able to prevent what is called exchange loss. Thus it was incorporated in the recent amendment of the Commercial Law as of 1 October as a leading item.

In this manner big enterprises have been assured of a path to procuring funds in large amounts nationally and internationally, at a cheap cost.

(2) Management Right Strengthened

Second, it is the question of strengthening management right.

The earlier amendment of the Commercial Law in 1974 was followed by widespread practices of irregularity and corruption such as environmental pollution, skyrocketing prices, and cornering, but in the amendment there had been no legal provisions against them. So the legal affairs committees of both houses of the Diet passed a resolution as a brought-forward item (supplementary resolution) demanding that the social responsibility of enterprises be incorporated in the Commercial Law. That is what touched off the latest amendment of the Commercial Law in the first place, but as if opposing it, Keidanren submitted a dozen items as pressing priority items, and as a result, practically no provisions have been made in the amendment for what was called the social responsibility of enterprises. Thus it has ended up being an amendment of the Commercial Law for strengthening management right centered around Keidanren.

For example, big corporations which have strengthened the power of the board of directors, on the ground that the audit under provisions of the Commercial Law is effected sufficiently by their own auditors or certified public accountants, have turned accounting papers--statements of profit and loss, and balance sheet--at the stockholders general meeting into a reporting item, not a voting item, and, as you know, restricted the rights of small stockholders, an overwhelming majority, in the form of depriving stockholders of less than 1,000 shares of their right to have a say or vote at the stockholders general meeting on matters of common interests, if not on matters of their own interests such as dividends; thus strengthening their management right centered on the board of directors. On the other hand, that part of incorporating the social responsibility in the amendment was all but scuttled. The intended detailing of "gratuitous conveyance of profits in terms of property" aimed at defining "bribery" was squashed by the strong opposition of Keidanren. Also squashed was the reform plan to have statements of accounts registered at the registry office for public inspection by anyone who so desires.

(3) The Preferential Tax System for Big Enterprises

Third, the preferential tax system for big enterprises is still in effect, and special tax reductions are made for big enterprises under the national tax policy.

For example, commercial corporations open branches in foreign countries where low taxes prevail, and retain their profits there. This is called takkusu hebun (tax heaven). Big and medium-size construction corporations and pharmaceutical corporations incur a lot of expenses, their specific nature unspecified, and their payers do not have to pay tax at the other end, once they pay tax at one end. Such payments amounted to 33.4 billion yen for the year 1980. Such payments represent money used as political contributions, as payoff to sokaiya [a person who holds a small number of shares of stock in a number of companies and attempts to extort money from them by threatening to cause trouble at the general meeting of the stockholders] and money paid to hospitals, that is, money linked to

irregularity and corruption, but by such payments big corporations will have made profits several times, several score times such payments.

A detailed examination of the system for reductions and exemptions of taxes under the Exceptions to Tax Laws Act reveals provisions directly connected to tax reductions for big enterprises. For example, for electric companies there is what is customarily known as reserve for water shortage and reserve for depreciation of atomic power plant projects, and even as the electric companies are now oriented to thermal power plants and atomic power plants, there is still in effect the preferential system which reduces or exempts taxes in case of loss by water shortage during the summer on the one hand, and on the other, allows special depreciation for atomic power plant facilities. Toden [Tokyo Electric Col, Ltd.] as of September 1981 had built up huge reserves to the tune of 16.1 billion yen for "water shortage" and 104.9 billion yen for "atomic power." And as for the iron and steel industry and the nonferrous metal industry, the basic law of the Corporation Tax Act allows special repair reserve which is commonly referred to as repair reserve for blast furnaces and the like. Nippon Steel Corp as of March of this year set up a huge repair reserve fund amounting to 129 billion yen. Moreover, most of the big enterprises, which build reserves for losses in overseas investments, are allowed to set up reserves in anticipation of losses to a certain extent in the case of overseas resources development such as prospecting for petroleum and coal or in the case of selecting overseas sites for factories. Big monopolistic enterprises are extensively taking advantage of such provisions. As for the notorious reserves for expected losses, the Commercial Law even after the latest amendment still allows the, including even those of the spontaneous nature, and the enterprise accounting principles also cannot but follow the provisions.

Speaking of the question of taxes, there is one jointly worked out by civil service workers centered around the National Federation of Trade Unions of Tax-Office Workers. What this has made clear among other things is that another look at the Exceptions to Tax Laws Act and provisions for issuing shares of stock at market prices alone shows that the enterprises have pocketed a total of 2 trillion and 181.1 billion yen under the preferential tax system centered on big enterprises. This establishes it, based on concrete figures, that if this [system] is abolished, it will no longer be necessary to cut back welfare or freeze (?human rights promotion).

(4) How Prices and Fees Are Decided

Fourth, it is the question of preferential treatment in deciding on prices and fees. Japan's government authorities, with a lot of leadership power in deciding on electircity fees, gas fees, and pharmaceutical prices, have been invariably adopting the method of allowing high fees and high pharmaceutical prices which are good to big enterprises but extremely hard on the people.

As you know, the price hike allowed the electric companies, following the first oil shock from 1973 to 1974, was an extremely large one which resulted

in their big profits. Again, at the time of the second oil shock before and after 1980, they raised the price once more. At present, even as it is said to have suffered a big exchange loss, the electric industry's earnings are relatively stabilized, and this the industry owes to the large raises in the electricity fees.

Speaking of pharmaceutical prices, the Ministry of Health and Welfare allows Japanese antibiotics to be sold at prices ranging from 3.6 times to 2.8 times the prices of similar U.S. antiobiotics. This invariably has been the source for the past 10 years of the profit of big pharmaceutical companies, the highest profit among all industries.

(5) Keeping the Industrial Base of Big Enterprises in Good Repair

Fifth, it is the question of keeping the industrial base in good repair, a question involving so-called special accounts for roads, harbor and airport facilities or investments in other public works projects, which are rendering a very big service in paving the industrial base of big enterprises.

(6) The Grant-in-Aid Policy

Lastly, the grant-in-aid policy is but a part in a certain sense of the many-sided preferential treatment of such big enterprises. What is more, the grant-in-aid policy is very ingenious. As mentioned above, I have briefly explained the many-sided preferential treatment of big enterprises, classifying the treatment into six categories. Now, hereinafter I would like to go deeper in examining the government's ingenious grant-in-aid policy for big enterprises and the government's subsidizing policy in fixing prices and fees and keeping the industrial base of big enterprises in good repair.

2. The Grant-in-Aid Policy for Big Enterprises

(1) The Flow of Grants-in-Aid to Big Enterprises

For what is called the flow of grants-in-aid to big enterprises there are various routes such as their flow from the state (1) direct to enterprises; (2) to enterprises through such recipients as government-approved foundations and technology research associations; (3) to enterprises through local self-governing bodies and special juridical personnel; and (4) to contracts with enterprises for projects supported by local self-governing bodies and juridical personnel. Again, the grants-in-aid are paid out under a variety of names indeed, such as grants-in-aid, defrayments, supplementary allowances, consignment fees, grants-in-support, and international defrayments from general accounts, special accounts, and government-related agencies. Therefore, specific big enterprises are paid grants-in-aid through routes in various names.

(2) The Contents of Grants-in-Aid

The major grants-in-aid to big enterprises, according to the 1981 and 1982 editions of "A Guide to Grants-in Aid" issued by the Ministry of Finance, are as Table 1 below:

Table 1. Grants-in-Aid to Big Enterprises (Amount in 100 million yen)

	Amount	Jurisdiction	Granted to:
Grants-in-Aid from General Accounts			
Grants-in-aid for expediting development of electronic computer	(61 (56	Ministry of International Trade and Industry	Civilian organization
Grants-in-aid for development of civil transport aircraft	(24 (18	-do-	Civil Transport Aircraft Society
Grants-in-aid for development of civil aircraft jet engine	(46 (57	-do-	Aircraft Jet Engine Techno. Research Association, etc.
Grants-in-aid for measures to rpomote information processing	(26 (26	-do-	Information Processing Promotion Soc.
Supplementary allowances for interest on funds for building ships for overseas sailing	(66 (0	Ministry of Transport	Shipbuilding company
Consignment Fees from General Accounts			
Consignment fees for R & E of basic ttechnologies for next generation industries	(24 (39	Min of Int'l Trade & Ind (Agency of Ind S & T)	Civilian organizations
Consignment fees for R & D	(114 (112	-do- (-do-)	-do-
Consignment fees for R & D of electronic computer basic technology	(1 (4	Ministry of International Trade and Industry	-do-
Consigament fees for R & D of new energy technology	(27 (24	-do-	-do-
Consignment fees for survey of technology of prospecting for mineral resources	(- (10	-do- (Agency of Natural Resources and Energy)	Metal mining group
Consignment fees for technological survey and	(6 (16	Defense Agency	Private person or corporation
Grants-in-Aid from Special Accounts			
Grants-in-aid for measures on location of electricity sources	(25 (9	Spec. Accts for development of elec. sources	Urban & rural private survey agencies
Grants-in-aid for diversification of electricity sources	(325 (362	-do-	Elec. enterprise; New energy development organizations

(Continued on next page)

Table 1. Grants-in-Aid to Big Enterprises (Amount in 100 million yen) (Ctd)

Grants-in-Aid from Special Accounts (ctd)	Amount	Jurisdiction	Granted to:
Grants-in-aid for rationalization of petroleum production	(109 (130	Spec. Accts for measures on coal & petroleum and substitute energy for petroleum	Private organization; Lubricating Oil Society
Grants-in-aid for substitute energy for petroleum	(190 (292	-do-	Private enterprise; Coal Technology Research Institute; new energy development organization
Supplementary Allowances from Special Accounts			
Supplementary allowances for measures on increasing stockpile of Petroleum Corp	(488 (747	-do-	Petroleum Corp
Supplementary allowances for interest on funds for petroleum storage facilities	(10 (19	-do-	Japan Development Bank, etc.
Consignment Fees from Special Accounts			
Various consignment fees for measures on stabilizing petroleum supply	(120 (170	-do-	Petroleum Corp., etc.
Fees for measures on rationalization of petroleum production and circulation	(23 (27	-do-	Private organization; private survey organization
Fees for measures on substitute energy for petroleum	(16 (11	-do-	Private enterprise; private organizations

Note: In column of amount, upper figure is for 1981, lower figure for 1982.
Source: "A Guide to Grants-in-Aid" by Ministry of Finance

This grant-in-aid policy has the following characteristics: First, it attempts to nurture ultramodern technologies in cooperation with big enterprises. Signifying this are the grants for electronic computer development and information processing. The aid to these big enterprises in developing ultramodern technologies, as clearly seen in Table 2 below, is grants for development of the next generation (the fourth generation) electronic computer, carrying forward what was accomplished by the payment of 68.6 billion yen from 1972 through 1976. In parallel with this, in 5 years from 1976 through 1979 [as given] the sum of 29.1 billion yen was given for the development of super LSI to the reserach association formed by Toshiba, Hitachi, Mitsubishi Electric, Nippon Electric, and Fujitsu. "That was a big success" says a Toshiba standing director still in office. The big enterprises having to do with electrical equipment, each of them as a monopolistic corporation sharing the technologies developed with the money paid out by the Ministry of International Trade and Industry, are enjoying today's prosperity. At present, the development of the next-generation electronic computer, with grants-in-aid totaling 29.5 billion yen for 5 years, is being undertaken by eight corporations with monopoly on electrical equipment such as Toshiba and Hitachi. The grants-in-aid stipulate that a part of the profits accruing from such research must be repaid, but actually up to the end of 1979 a mere 200 million yen was repaid.

Table 2. A Summary of Major Grants-in-Aid with Stipulation for Repayment from Profit

Name of Grant-in Aid	Jurisdiction	Granted to (directly or indirectly)	Amount of Grant (in 100 million yen)	Period of Grant	Period for Repayment from Profit	Actual Amount Repaid from Profit
Fees for expediting development of electronic computer, etc.	Min of Int'l Trade & Ind	Toshiba, Hitachi, Mitsubishi Elec, Nippon Elec, Oki Elec Ind	686	1972-1976	(5 yrs) 1977-1981	200 million yen as of end of 1979
Fees for expediting development of super LSI	-do-	Toshiba, Hitachi, Mitsubishi Elec, Nippon Elec, Fujitsu	291	1976-1979	(5 yrs) 1984-1987	
Fees for expediting development of basic technology for next generation (4th generation) electronic computer	-do-	8 corporations such as Toshiba, Hitachi	235 (Proposed)	1979-1983	(5 yrs) 1984-1988	
Fees for developing civil transport aircraft (YX)	-do-	Mitsubishi Heavy Ind, Kawasaki Heavy Ind, Fuji Heavy Ind	160	1978-1982		
-do- (YXX)	-do-	-do-		1981-		
Fees for developing civil aircraft jet engine (XJ8)	-do-	Mitsubishi Heavy Ind, Ishikawajima-Harima Heavy Ind, Kawasaki Heavy Ind	525	1980-1988		

Source: Data released by Ministry of International Trade and Industry

Second, for the development of civil transport aircraft (YX) and civil aircraft jet engine (XJB) grants-in-aid have been paid to Mitsubishi Heavy Industries, Kawasaki Heavy Industries, Fuji Heavy Industries, and Ishikawajima-Harima Heavy Industries. It is reported that for YX the sum of 16 billion yen was paid from 1978 through 1982 and the amount for XJB from 1980 through 1988 will total 52.5 billion yen. Money is being spent always with an eye on the development of aircraft for which the industry can be utilized instantly as munitions industry.

Third, grants-in-aid to energy-related corporations, private enterprises, and private organizations amount to a very large sum. As grants-in-aid for petroleum stockpile, rationalization of petroleum production, and measures on substitute energy for petroleum, etc. the huge sum of nearly 100 billion yen was paid to private enterprises, Petroleum Corporation, and private organizations for the year 1982. Prospecting for petroleum and its development, on which I will comment later, is one of the projects that has thus been put in place. Moreover, the amount of direct and indirect grants-in-aid to electric companies for atomic power plants is also large. Included in them for the year 1982 are grants-in-aid for power plant sites amounting to 900 million yen and grants-in-aid for diversification of electric power sources amounting to 36.2 billion yen.

What was interesting in going over these details is the fact that the project expenses for stockpiling tankers increased by a large margin to 124.7 billion yen for the year 1982 from 72.1 billion yen for the previous year. As is well known, in the case of stockpiling oil tankers, the tankers are hired from the private marine transportation business for a fee. At present, the company which owns the largest number of tankers in Japan is Sanko Steamship, of which Toshio Kohmoto was once the president and still is one of the major stockholders. I remember reading only recently an article on the stock page of a certain newspaper that Sanko Steamship was making money out of lending the largest number of tankers to the government. It would appear that even here there is a delicate political connection.

Shown in Table 3 below is the shift in the amounts of grants-in-aid to five of Japan's representative electrical equipment and heavy industries corporations, amounts estimated from the date released by the Ministry of International Trade and Industry. According to this estimate, Mitsubishi Heavy Industries received grants-in-aid amounting to 7.8 billion yen for the year 1982 and will receive 8.3 billion yen for the year 1983. The grants-in-aid to the five corporations for the year 1983 will reach a huge total of 25.1 billion yen. Moreover, the grants-in-aid have been increasing greatly from year to year.

Table 3. Shift in Estimated Grants-in-Aid to 5 Corporations such as Mitsubishi Heavy Industries (Under Jurisdiction of Ministery of International Trade and Industry) Unit: million yen

		1978		1979		1980		1981	1982		1983		Total of 6 yrs
	Break-down	No of c/s	Amount	No of c/s	Amount	No of c/s	Amount	No of c/s	Amount	No of c/s	Amount	No of c/s (Est.of request) Amount	Amount
Mitsu-	G-i-A	1	429	2	1,830	6	3,451	9	4,999	11	6,331	10 7,445	24,985
bishi	Con F	6	1,492	8	2,796	8	4,112	9	1,441	8	968	7 903	11,712
H.I.	Total	7	1,921	10	4,626	14	7,563	18	6,440	19	7,799	17 8,348	36,697
	G-i-A	1	1,675	4	1,535	7	1,612	12	3,617	14	3,668	14 4,004	16,111
Hitachi,	Con F	7	1,054	9	2,004	10	4,051	12	863	12	1,230	11 1,686	10,888
Ltd	Total	8	2,729	13	3,539	17	5,663	24	4,480	26	4,898	25 5,690	26,999
	G-i-A	1	1,675	3	1,472	4	1,329	7	1,904	8	2,259	8 2,283	10,922
Toshiba	Con F	5	571	7	799	9	1,165	12	1,070	13	1,540	13 2,063	7,208
Corp	Total	6	2,246	10	2,271	13	2,494	19	2,974	21	3,799	21 4,346	18,130
	G-i-A	1	429	2	1,830	5	3,234	6	2,791	7	3,053	6 3,445	14,782
Kawasaki	Con F	2	1,088	3	1,239	3	956	5	1,004	3	450	3 399	5,136
H.I.	Total	3	1,517	5	3,069	8	4,190	11	3,795	10	3,503	9 3,844	19,918
Ishikawa-	G-i-A	0	0	1	63	3	895	3	1,884	4	2,136	4 2,020	6,998
jima-Ha-	Con F	4	1,111	5	1,413	5	1,274	9	1,386	7	948	7 890	7,022
rima H.I.	Total	4	1,111	6	1,476	8	2,169	12	3,270	11	3,084	11 2,910	14,020
Total 5 Corp-	G-i-A		4,208		6,730		10,521		15,195		17,947	19,197	73,798
	Con F		5,316		8,251		11,558		5,764		5,136	5,941	41,966
orations	Total		9,524		14,981		22,079		20,959		23,083	25,138	115,764
								Compared with preceding year				+8.9%	
								Compared with 1978				2.6 fold	

Note: The amounts are average figures of each corporation arrived at by dividing by the number of participating enterprises the grants-in-aid from data released by Ministry of International Trade and Industry as carried in "A Guide to Grants-in-Aid" by Ministry of Finance.

In Osaka on 22 September 1982, in his "suggestions regarding the basic posture in compiling next year's budget--for boldly wielding the scalpel in the 'sacred cow' of administration from the people's standpoint" Chairman Fuwa contended that "the next 'sacred cow' where the scalpel must be wielded is the grants-in-aid to big enterprises," and went on to state that "the grants-in-aid the government offers to big enterprises in the name of 'aid in technological development' amount to a huge sum. In the computer field alone, the grants-in-aid earmarked for 8 big enterprises such as Hitachi, Toshiba, and Fujitsu for the 2 years of 1983 and 1984 amount to no less than 10 billion yen. All segments combined, the grants-in-aid paid out by the Ministry of International Trade and Industry to the five corporations alone--Mitsubishi Heavy Industries, Toshiba, Hitachi, Ishikawajima-Harima Heavy Industries, and Kawasaki Heavy Industries, have amounted to 90 billion yen in 5 years from 1978 through 1982. Although small and medium enterprises account for 52 percent of our country's manufacturing output and delivery, the grants-in-aid offered to small and medium enterprises for technical development for the same period have totaled 15.1 billion yen or a mere one-sixth of the grants-in-aid to the big five." (AKAHATA dated 23 September) Even though the financial circles as the prime mover are positively pushing for ad hoc administrative reform, they are mum on such grants-in-aid and various subsidizing measures for them. This is an intolerable attitude.

3. The Subsidizing Policy for Big Enterprises

Next, I would like to make clear by concrete instances the subsidizing policy for big enterprises, over and above direct grants-in-aid to them.

(1) Petroleum Prospecting and Development

For instance, for the year 1981 reserves for [expected] loss in overseas investments were set up by Nippon Steel for 4.9 billion yen, Sumitomo Metal Industries for 3.1 billion yen, Mitsubishi Oil for 2 billion yen, Kawasaki Heavy Industries for 1.6 billion yen among others. A number of these corporations have invested these sums of money in development companies prospecting for petroleum. By the investments of 99 such big enterprises and of the Petroleum Corporation, several petroleum development projects have been worked out. The grand total of investments by the 99 big corporations in the projects reached 124.1 billion yen by the year 1980. As for the Petroleum Corporation, it is reported that it has invested in [each] project an amount equal to 20-30 percent of its capital, and financed 40-60 percent of its loan. Thus petroleum development is being carried out, with numerous development companies established on the principle of "one project, one company," but in case no oil is found within 8 years from the start of the prospecting, repayment of the principal amount financed is exempted. As a matter of fact, the first case of such exemption occurred in June 1981 for 1.42 billion yen from the Akaska Petroleum Development. In case of successful prospecting, a special levy is set at a very low rate. In Japan, there is a time-honored saying: "seiko barai" [payment upon success]. Even this seiko barai is a very small amount, and till now, Abu Dhabi Petroleum paid a mere 193 million yen from 1973 through 1980.

Unquestionally a case of "onbu ni dakko" [give him an inch and he will take an ell], the system in place is such that big enterprises can prospect for petroleum and develop it.

(2) The Subsidizing Policy for Toyota Motor Corp

Next, I must take up the cordial subsidizing policy for Toyota. What nagged me while analyzing the National Railways is the fact that the National Railways, partly at the request of Toyota and partly because the railways need to expand business, formed what is known as the Okata Line, in 1971. Originally, this was a line carrying commuters from Okazaki to Tajimi but was reconstructed as a line from Shin Toyota (formal name, Kitano Masuzuka) to Okazaki for carrying automobiles to Okazaki. The reconstruction of the line, 20 kilometers long, was completed in 1979 at a cost of 41.1 billion yen. In the beginning, Toyota used the line for a while after reconstruction, for transporting automobiles, but for what it claimed to be a change in the situation, has all but stopped using the line, deciding that after all it is better to transport automobiles by trailers. So, for all intents and purposes, the reconstruction was for nothing. The cumulative figure in the red so far has reached 12 billion yen, the yearly deficit being 2 billion to 2.1 billion yen. I believe it was Hisashi Miura, member of the House of Representatives, Communist Party, made an issue of this in the Diet.

Nevertheless, the next time around Toyota constructed its Tahara Plant a short distance away from Toyohashi. The site, 315 hectares, is one which the Enterprise Bureau of Aichi Prefecture subdivided and sold to Toyota. So the local people popularly refer to the Enterprise Bureau as "Toyota Development Department." And nearby there are the Tahara Bridge, Number 1 in the Orient, and a wonderful expressway and harbor. The expressway and bridge cost about 13 billion yen. The Mikawa Harbor Bridge alone cost 6 billion yen. Toyota, which inflicted a loss on the National Railways for the construction of the Okata Line and had such huge public funds invested for the benefit of its Tahara Plant, is earning a profit, one which is the largest or second largest in Japan.

(3) The Subsidizing Policy for Big Pharmaceutical Corporation

Next, according to my inquiry into the question of big pharmaceutical corporations and pharmaceutical pricing standards, there is an item regarding the shift in their earnings, an item called the percentage of total capital's ordinary profit which indicates the amount of profit versus total capital invested. For the year 1971, the profit was 9.89 percent, the second highest among all industries, except for the year 1976 for which it was the third highest. Consistently, they have earned the highest rate of profit. In particular, although the turnover rate of total capital has been somewhat slow, for the past 10 years they have been assured of the highest earnings among all industries in terms of the percentages of sales proceeds and ordinary profits. The rate of their own investments as capital is also very high, the highest or second highest. In Japan, own investment as capital averages about 15 percent for industries, and about

20 percent for manufacturing business but in the case of big pharmaceutical corporations, it is 42.82 percent, the second highest rate of accumulation next to the electrical household appliances industry.

The secret of such a huge profit lies in the excessively high pharmaceutical prices fixed by the Ministry of Health and Welfare. According to my investigation, as shown in Table 4, the prices of Japanese-made pharmaceuticals are several times the U.S. counterparts; Shionogi's Keflin, 2.8 times the price of the U.S.-made Keflin; (?Sefatrexil), 3.6 times; Fujisawa's (?Sefamezin), 1.6 times; Shionogi's (?Kefrozin), 1.7 times; Taito-Pfizer's (?Zeopen), 2.4 times. The pharmaceutical prices have thus been fixed for high profits. This is what assures the big pharmaceutical corporations of high profits. Overhead is extraordinarily high for pharmaceutical corporations. For one-third of the personnel is referred to as personnel proper, people who are sales personnel of sorts working on university hospitals and public hospitals on behalf of the big pharmaceutical corporations and taking care of hospital personnel for tockets [transportation] and hotels when they travel to attend academic meetings. A consdierable number of such personnel on their payroll notwithstanding, they are boasting of high profits, high accumulation.

Table 4. Comparison of Prices of Identical Japanese and U.S. Antibiotics (In Liquid Form for Injection)

Japan				United States					(Ⓐ - Ⓑ) Ⓐ / Ⓑ
Trade Name of Drug	Name of Company	Unit	Ⓐ Standard Price of Drug (yen)	Trade Name of Drug	Name of Company	Unit	(Note 1) Drug Price in $	(Note 2) Ⓑ Price converted to yen	
Keflin	Shionogi	1 g per vial	2120	Keflin	Lilly	1 g per vial	2.98	745.00	(1375.00 yen) 2.8 fold
(?Sefatorexil)	Japan Bristol	-do-	2469	(?Sefazil)	Bristol	-do-	2.74	685.00	(1784.00 yen) 3.6 fold
(?Sefazin)	Fujisawa	-do-	2400	(?Kefzol)	Lilly	-do-	6.01	1502.50	(897.50 yen) 1.6 fold
(?Kefrozin)	Shionogi	-do-	2040	(?Rollizin)	Lilly	-do-	4.75	1187.50	(852.50 yen) 1.7 fold
(?Zeopen)	Taito Pfizer	-do-	840	(?Zeopen)	Roerig	-do-	1.414	353.50	(486.50 yen) 2.4 fold

Note 1: U.S. prices as listed in the Red Book (1982 edition)
Note 2: 250 yen to the dollar
Source: "Structure of the Pharmaceutical Business for High Profits, High Accumulation" by Takashi Yamaguchi in SHINSATSU KENKYU, issue No 121.

4. The Essense of the Subsidizing Policy

What is the essence of the subsidizing policy for the preferential treatment of big enterprises? The essense of this preferential treatment is said to be a policy to nurture key industries (iron and steel, electricity, petroleum, electrical equipment, etc.) and at the same time ultramodern industries (so-called semiconductor, optic fiber, etc.) and in addition, the military industry (aircraft, radar, etc.). Moreover, it is a policy to lend a hand in helping industries such as the construction industry and big pharmaceutical corporations, which make large political contributions to the Liberal Democratic Party, make big profits.

On the other hand, I must point out that it is also a policy to scrap "lagging" industries and marginal enterprises. Strange to say, the subsidizing policy is operating as a driving force to cut down enterprises of medium size or smaller in such industries as aluminum, fertilizer, and shipbuilding. This is done in the form that in the event of so-called freeze and abandonment of facilities, the Development Bank will do the financing.

Under a policy of such nurturing and cutting down, a conversion of the industrial structure is being made. What is called the pigeon of the '80s has come out of the Ministry of International Trade and Industry. What is aimed for is nurturing those industries surviving the recession of the '80s while formulating countermeasures to overcome the recession. What this means is that the surviving enterprises will be none other than the monopolistic big enterprises.

In conclusion, I must point out that the subsidizing policy in favor of big enterprises represents the interim adjustment line [rincho sen] and at the same time, a line aiming for a military power. This was explained well in the speech of Chairman Fuwa in Osaka on 22 September.

To add a word, at the bottom of it is the deepening crisis of Japan's capitalism about which it is impossible to do anything. Since the first oil shock national bonds have been issued to the tune of nearly 100 trillion yen and various measures have been taken to give preferential treatment to big enterprises. Nonetheless, the crisis is deepening. This is the reality and the essense of this policy, I think.

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CSO: 4105/131

ECONOMIC

VARIOUS ASPECTS OF VENTURE BUSINESS REPORTED

Present State

Tokyo NRI SEARCH in Japanese Dec 82 pp 12-13

[Text] Present State of Venture Capital

From 1972 to 1974, there were successive births of venture capital in Japan (a total of eight companies), and the first venture capital boom took shape. In connection with the economic stagnation resulting from the oil shock, however, venture capital activity did not advance; on the contrary, some [companies] had to liquidate or change trades. At present, six companies are continuing activity. The investment total for the past 10 years has been 345 businesses, 12.6 billion yen; the investment balance at the end of 1981 was 242 businesses, 8.8 billion yen.

Aside from private venture capital, there exist organizations which foster medium and smaller businesses or assist research and development activities. The governmental Smaller Business Investment Advancement Corporation and the Research and Development Industry Advancement Center form the nucleus.

The Smaller Business Investment Advancement Corporation established three offices in November 1963, in Tokyo, Osaka, and Nagoya. With self-capital expansion of smaller business as its objective, its major duty is to underwrite newly issued stocks and convertible debentures. As of March 1982, the investment total was 1,737 companies with 46.8 billion yen; to date, nine companies have managed to be listed on the exchange.

The Research and Development Industry Advancement Center was established in July 1975 with the objective of implementing measures to promote R & D industries. Its main work is suretyship obligation for medium and smaller businesses that are developing and commercializing new technologies and new products. Its 7-year record up to the end of fiscal 1981 was 143 suretyships (3.8 billion yen), with seven successes.

However, the move toward private capital here suddenly has become active. Below, the focus is on private venture capital, stating growth-inhibiting factors, reactivation conditions, and direction of future expansion.

	Nihon Enterprise Development (NED)	Japan Amalgamated Finance (JAFCO)	Universal Finance (UFC)	Central Capital (CC)	Tokyo Venture Capital (TVC)	Diamond Capital (DCC)
Date Founded	Nov 1972	Apr 1973	Dec 1973	Jan 1974	Apr 1974	Aug 1974
Established Sponsors	Long-Term Credit Bank of Japan Japan Venture Business Association (Daiwa Securities)	Nomura Securities	Yamaichi Securities	Nikko Securities Tokai Bank	Dai-Ichi Kangyo Bank Nippon Kangyo Kakumaru Securities	Mitsubishi Bank
Capital	900 million	1 billion	600 million	600 million	600 million	500 million

Figure 1. Activity Status of Major Venture Capital Companies

*Partly corrected, based on SKUKAN DAIMONDO (6 Mar 82) as source

Growth-Inhibiting Factors for Venture Capital

The biggest reason why Japanese venture capital has not expanded up to now is that venture capital itself is not a worthwhile business. Three points are cited as factors: 1) capital gain is difficult to obtain, 2) fundraising costs are high, and 3) there are restrictions on management leadership of invested businesses.

Capital gains through the public offering of stocks are the essence of venture capital management, but at present the standards for listing on the exchange and over-the-counter registration are strict, and considerable time is required for recovery of funds.

Capital gains are also difficult to obtain; there must be dependence on loans as the source of funding, and backspreads frequently appear between procurement costs and investment yields. In cases where there is a long-recovery period, this becomes a great liability.

For unsecured investments, the management ability of the business invested in becomes the greatest "security." In Japan, however, due to administration of the Anti-Trust Law, the participation of management and the dispatch of executives to a business that has been invested in are forbidden, and it is difficult to conduct responsible leadership.

Under such conditions, it is hard to establish a venture capital management base, and furthermore the scope of businesses invested in becomes limited. In addition, the fact that venture capital does not have sufficient investigation or inspection powers of its own, and the fact that a good many smaller businesses in Japan have displayed a response of rejecting the introduction of outside capital or the public offering of stock, can be cited as factors blocking the expansion of venture capital.

New Move for Venture Capital

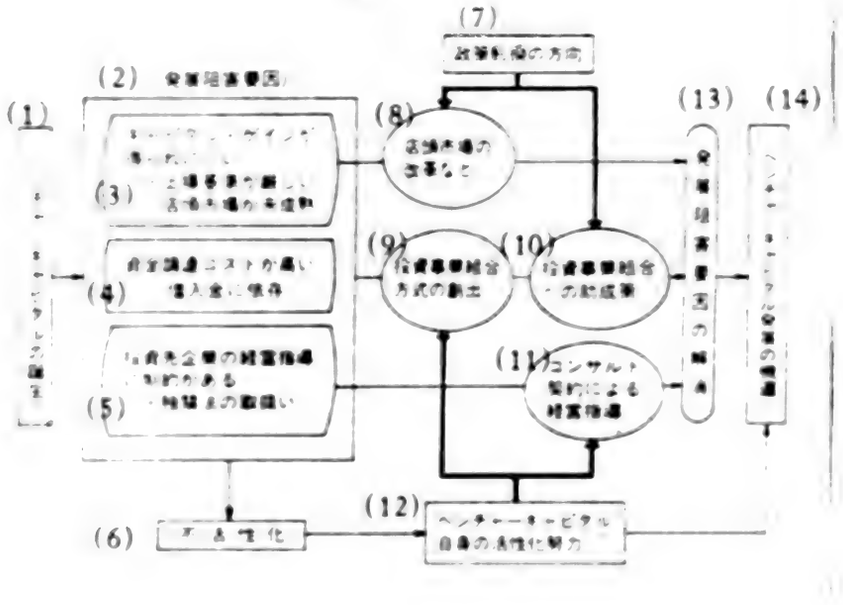
The recent move toward reactivation of venture capital can be grasped in two aspects: 1) the rush to establish new capital, and 2) increased volume of activity for existing capital.

Japan Invest Finance, inaugurated in August 1982 (financing by Daiwa Securities, the Long-Term Credit Bank of Japan, etc), led the way to the second venture capital boom. Then, New Japan Securities and Wako Securities also established new venture capital in December with Industrial Bank of Japan and joint financing, respectively. Also, Sanwa Bank has announced the new establishment of a venture business advancement organization in 1983, when it marks its 50th anniversary. In addition, there has been a jostling of moves under the surface and not a little talk of branching out to general trading companies and foreign capital groups, etc.

On the other hand, the investment association (JAFCO No 1) established by Japan Amalgamated Finance (Nomura Securities group) in April 1982 had epochal significance in Japanese venture capital expansion. This took the form of

assembling as partners individuals and businesses who would invest risk money and handle by themselves the investment research work for businesses to be invested in. The biggest objective is risk diversification. by this means, large-scale investment in one business becomes possible, and the contributing influence on management development of the businesses invested in has been increased by a bold leap. Also, this same company has devised methods to conduct real management leadership by concluding consultant contracts with the businesses being invested in. At this time, it is playing the leading role in the world of venture capital, and the degree of attention from other companies is high.

Figure 2 Trend of Venture Capital Expansion



Key:

1. Birth of venture capital
2. (Factors inhibiting expansion)
3. Capital gain difficult to obtain
   * Strict exchange listing standards
   * Immature over-the-counter market
4. Fund-raising costs high
   *Dependence on loans
5. Restrictions on management leadership of invested businesses
   *Administration of Anti-Trust Law
6. Inactivation
7. Direction of policy shift
8. Over-the-counter market reform, etc.
9. Establishment of investment association method
10. Policy-promoting investment associations
11. Management leadership through consultant contracts
12. Venture capital's own reactivation efforts
13. Disappearance of factors inhibiting expansion
14. Venture capital expansion trend

Source: NRI compilation

Future Outlook for Venture Capital

The creation of investment associations and the strengthening of consulting functions are efforts to clear away inhibiting factors No 2, "fund-raising aspect", and No 3, "restrictions on management leadership." In addition, the moves toward a policy shift by government authorities mean that inhibiting factor No 1, "capital gain recovery stipulation," is headed in the direction of a solution.

The Ministry of International Trade and Industry is making a strenuous effort to nurture venture capital. Having a period of stable growth at present, venture business has taken a position as a driving force in the development of the economy, and there is firm recognition that the growth of venture capital is indispensable for promoting this. On the other hand, the Ministry of Finance has taken a drastic second look at the ideal state of the stock market and has hardened its policy on entering operations. At the Securities and Exchange Council beginning in October, it laid out the problems of the over-the-counter market.

The opportunity for reactivation of venture capital now seems ripe, and various companies in the business world are greatly involved in switching to a policy of positive enlargement and are hastening the building of that system. If responsible actions and management efforts such as raising the credibility of investors and invested businesses continue to be taken, there can be great expectations for an expansion of venture capital.

Overseas Strategy

Tokyo NRI SEARCH in Japanese Dec 82 pp 18-19

[Text] Overseas Strategy; Internationalization of Smaller Businesses Promoted

Internationalization of the Japanese economy is progressing, and the internationalization of smaller businesses also is being greatly promoted within the deepening interdependent relationships in the world economy. The percentage occupied by smaller business products (business products of which total smaller business shipments occupy over 70 percent) in total exports dropped from 25.9 percent in 1970 to 14.4 percent in 1981, but the relative importance of the heavy industry category in the breakdown has increased. Also, many smaller business products are indirectly exported because of their incorporation as parts in the products of big business, etc. Recently, high value adding to the export products of smaller businesses is proceeding, and the internationalization of smaller business is seen as a qualitative change.

Moreover, the weight of smaller businesses in foreign investment has increased. Among foreign investments by Japanese businesses in 1980, 45.0 percent (1,100) of the investments and 17.2 percent of the monetary total (860 million dollars) were made by smaller business. Manufacturing industry investments, whose objective is the utilization of the local labor force of developing countries, are on a downward trend, but an increasing trend is indicated in trade and service industry investments which have the goal of opening up markets in advanced nations, centering on North America.

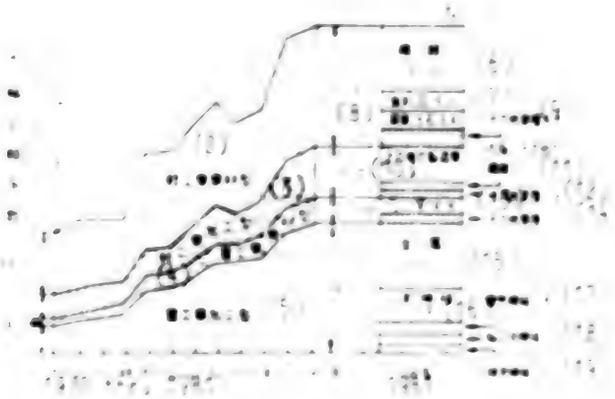
Further expansion of the internationalization of smaller businesses is inevitable, and the demands from overseas for local branches also are becoming strong. There is a high evaluation of smaller businesses in Japan, which planned for the high value adding appropriate for an international division system, and venture business in particular can be the standard bearer for internationalization from that positive posture.

Venture Business' Great Desire for Internationalization

The driving force for the internationalization of venture business is, first of all, high technology capability; secondly, superior product planning capability; and thirdly, information collection capability, pivoting on a direct sales service system.

However, the above three points are also relevant to the internationalization of smaller business in general as well as that of big business, and this is also true in cases where ventures deal with the domestic market. The inherent characteristic of ventures which have internationalized can be found in the very fact that from their beginning, these businesses were established with a view toward the world market.

Figure 3 Change in Export Increases by Industry Category of Smaller Business Products (yen base) 1970 = 100



Key:
1. Export volume index
2. Light industry raw materials
3. Light industry processing
4. Heavy industry raw materials
5. Heavy industry processing
6. Textiles
7. Food products
8. Ceramics, earthernware stoneware
9. Other
10. Other manufacturing
11. Clothing, other textiles
12. Other
13. Chemical
14. Other
15. Metals
16. General machinery
17. Electrical machinery
18. Transport machinery
19. Precision machinery

Data: Finance Ministry "Customs Clearance Statistics," MITI "Industry Statistical Tables"
Source: "Smaller Business White Paper, 19[illegible]"

Many ventures with strong designs on internationalization have aimed at the subdivided/specialized leading-edge technology-related market which has not been profitable for big business, such as systems houses (personal computers, office computers, as well as development and production of tools to aid development for program writers, etc, and development of accompanying software). The expectation that growth will soon top out with just a narrow domestic market has caused their eyes to turn early toward the world market. Also, in the leading-edge technology field, in which Europe and the United States are ahead of Japan, establishment of a U.S.-European market precedes the Japanese market. In this case, ventures established in Japan start as businesses specializing in exports.

Furthermore, the special Japanese faith in foreign makes can be cited as a stimulus to ventures for internationalization. No matter how good a product that an unknown smaller business makes and sells to big business, the probability of its success in Japan will be low in contrast to that in Europe and the United States. Conversely, a product that has a record of being utilized in Europe and the United States will be welcomed. The reverse invasion by Kyocera is probably a good example. Internationalization in order to capture the Japanese domestic market is a possibility.

For venture business, which is a smaller business, international expansion is not easy by any means, but internationalization strategy has a place as a method for developing new markets while avoiding direct competition with big business.

Three Examples of International Ventures

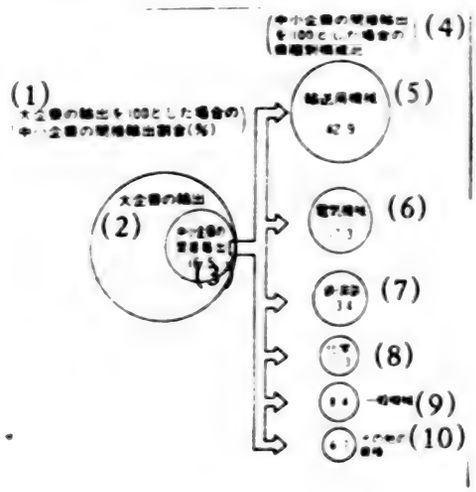
Ai Electronics Corp., established in 1962 with sales of 3 billion yen in 1981, is a special manufacturer which, with high technology as a weapon, has promptly developed microcomputers and prepared software and manuals (called paperware). Perceiving the growth of microcomputers and their peripheral systems, it has insured price competitiveness by specializing. Exports, which began in 1978, have built a direct sales network in 45 locations and 40 countries and have grown to 1 billion yen in sales (1981).

Logic Systems International, established in 1973 with sales of 2 billion yen in 1981, is a model for venture business with designs on internationalization. It developed as an export business at Europe, perceiving that demand was rising in Europe for microcomputers used in special fields and for systems aiding such development and software, and that unknown manufacturers also were accepted in Europe, which take performance seriously, and continuity, once utilized, was high. It penetrated as a "brain group" conducting only development and design; a sensitive response to the trend of needs also worked as a plus.

Among venture businesses having a record in internationalization, with concentration on makers of leading-edge technology, the AVIC Company, established in 1965 with sales of 2.89 billion yen (1981), is an unusual distribution venture. It handles the importing into Japan of unique technology products that general trading companies and medium-size companies have overlooked.

Recently, with a view toward international emphasis, it began exporting products of Japanese manufacturers that had not been in the overseas market. It also conducts a consulting business, playing the role of an intermediary in technology tieups and sales tieups. It also has performed a social mission in expanding free trade by noting technological gaps between Japan [on the one hand] and the United States and Europe, and by digging up buried needs.

Figure 4 Percentage Which Indirect Exports of Smaller Businesses Occupy in Big Business Exports



Key:

1. (Percentage of indirect exports of smaller businesses in cases where big business exports = 100)
2. Big business exports
3. Smaller business indirect exports
4. (Composition ratio by industry in cases where indirect exports of smaller businesses = 100)
5. Transport machinery
6. Electrical machinery
7. Ferrous/nonferrous
8. Chemical
9. General machinery
10. Other

Data: Finance Ministry "Customs Clearance Statistics"; MITI, "Industry Statistical Tables"; Small and Medium Enterprise Agency," 1979 Extension Tables"

Surmounting Lack of Funds, Personnel

Even venture businesses which have garnered success in the world market have not been able to escape the troubles peculiar to ventures. These are a lack of funds and a lack of personnel. Compared to medium-size businesses which are already in a stable period, venture businesses have difficulty raising funds. After [a firm] has built a firm foothold with internationalization, more funds than ever before are necessary to accelerate growth. Also, from

the standpoint of enlarging direct sales routes, the quality of personnel dispatched is in question. Research and development, planning, and collection of information are strongly swayed by personnel, as well. In a venture business, even if the founder and his fellows of like mind are excellent persons rich in enterprising spirit, the standard of the general employees often is mediocre. In the future, at the same time that policy expansion is sought for support in financing and other aspects in order to promote internationalization, it will also be necessary for the business to make an independent effort to conduct organized personnel training.

For venture businesses, internationalization is both a hurdle and also a jumping platform for growth. The internationalization of smaller businesses is desired in order to take care of demands by semiadvanced nations for market openings and to recover from the trade friction with advanced nations. Furthermore, the reevaluation of small businesses overseas brings moves to attract Japanese business. As the standard bearer for the internationalization of smaller businesses, expectations are high for venture business.

Miti Policy

Tokyo NRI SEARCH Japanese Dec 82 p 20-21

[Text] Measures for Advancement and Promotion of Venture Business; Drift Toward "Venture Policy"

The clear placement of advancement and promotion of venture business as a policy objective of the Ministry of International Trade and Industry has been quite recent. Up to now, of course, there have been many measures with the objective of nurturing smaller businesses of promoting research and development, and among them have been no small number that have a deep relationship with nurturing and promoting venture business (research and development industry). At present, however, there is no "policy pertaining to venture business," and completion of a "policy targeted at venture business" has become a necessity.

In the midst of the economic stagnation that has continued since the oil shock, the MITI administration has been forced to spare great energy for emergency countermeasures. However, initiation of economic activity by just a passive policy response is quite remote, and it is a situation that unreasonably expects much from the independent vitality of big business. Thus, as a driving force for economic development in this new enviornment, a closeup has quickly been made on venture business. Even the technopolis concept promoted by MITI has the nurturing of venture business as a basic requisite, and "venture policy" has come to occupy a leading position in the MITI administration.

Present Status of Policy Study

In November 1981, MITI "venture policy" was reported fully in the "Research and Development Industry Advancement and Promotion Policy Research Committee Report" (compiled by the Research and Development Industry Advancement

Center). In this report, seven items were cited as advancement and promotion policy: 1) guarantee of funds, 2) guarantee of personnel, 3) guarantee of information, 4) strengthening of management makeup, 5) regional development, 6) edification and dissemination of policy, and 7) expansion and strengthening of the Research and Development Industry Advancement Center. Of these items, great weight is placed on fund-guarantee measures, and the necessity of nurturing and promoting venture capital is emphasized.

In July 1982, MITI released a draft of the "Research and Development Industry Investment-Promotion Bill" (tentative title). The chief contents of this bill were: 1) establishment of a registration system for investment associations, 2) measures for preferential treatment of association investments in the tax system, 3) applicable exclusions from the Anti-Trust Law relating to management leadership in businesses invested in, and 4) establishment of an investment insurance system. However, MITI has held off proposing this bill in the ordinary Diet session. Difficulty in provisions as to just how far to widen industry category designations has been cited as one point in the background. At MITI, it seems that industry categories are not defined by "research and development type," and rather than include service industries as "technology plus enterprising spirit," it was judged that wide coverage conforms to the true state of the nation.

At present, MITI has established a "Venture Capital Advancement and Promotion Policy Research Committee" and is continuing to study policy. There is no mistake that enactment of a new bill and readjustment of the over-the-counter market are largely featured in the MITI concept. However, as immediate policy, the plan is to deal with the matter through an expansion of functions and positive activity on the part of the Research and Development Industry Advancement Center and Smaller Business Investment Advancement Corporation.

Over-the-Counter Market Reform Problems

The immaturity of the over-the-counter market can be cited as a large cause of the inactivity of Japanese venture business and venture capital. The problems of reforming the over-the-counter market have been widely debated in the past as a link to a second look at the capital market. However, it can be said to be a fact that "venture policy" has contributed to aggravating and accelerating this debate.

Problems cited for the present situation center on three points: 1) registration standards, 2) fundraising functions, and 3) regulation of securities companies.

Registration standards, viewed internationally, have become rather strict. In the United States, over-the-counter registration standards are decidedly lenient, and this is seen as a cause for the flocking of venture business.

Regarding fundraising functions, the fact that public offering sales and new shares issued at market prices are not authorized is considered a problem.

Details of the current regulations concerning securities companies include: 1) investment solicitation restrictions for general investors, 2) trust prohibitions on market orders, and 3) restrictions on self-trading.

These standards and regulations were established with the goal of investor protection as their basis, but they have become a great cause of the inactivity of the over-the-counter market. Along with a relaxing of registration standards, the Japan Stockbrokerage Association and MITI have hinted at a relaxation of several regulations, with public offerings, notification of information to the investor, as well as the investor's own responsibility for thorough common knowledge as preconditions. There is also the concept of establishing a third market targeted at venture business.

On the basis of these debates, the Securities and Exchange Council at present has started to take a hard second look at the ideal state of the stock market, and over-the-counter problems also are listed on the items to be studied. It would be too impetuous to hastily reform the over-the-counter market, using the United States as a model, some say. Policy adjustments probably will be necessary in order to effect a harmonious balance between protection of the investor and promotion of the industry.

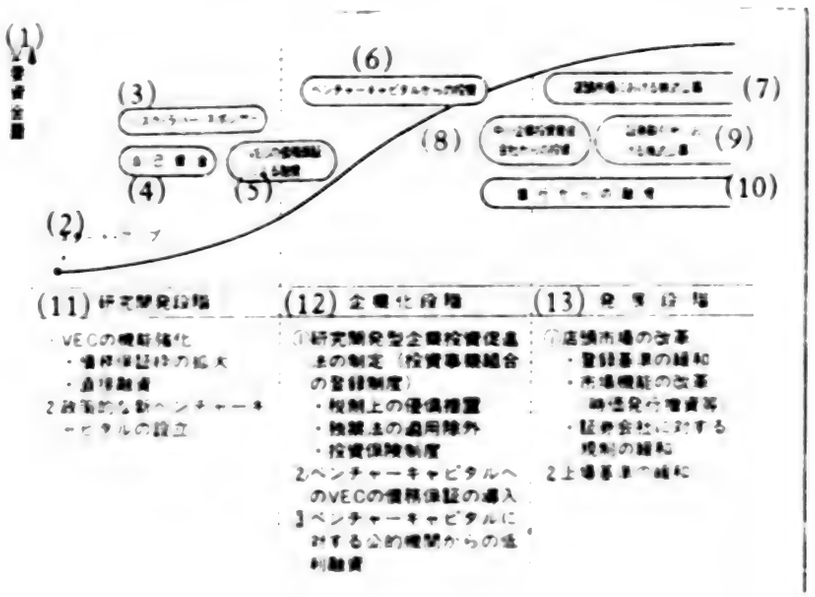
Topics of Comprehensive "Venture Policy"

There is a feeling that perhaps the present venture policy debate has greatly shifted to measures nurturing venture capital. The importance of venture capital goes without saying, but there are a number of policy topics that should be studied aside from that.

First of all, there is the establishment of a relationship of organic cooperation and assistance between credit organizations, including venture capital. Venture business generates various demands for funds in its development stage, but credit organizations vary in support according to the details or scale of the fund demands or the character of the business. The suretyship obligations of the Research and Development Industry Advancement Center (VEC) have become the main force at present in connection with the research and development stage, but establishment of new venture capital as a matter of policy also has become a topic of conversation. Also, there has been a great clamor for direct financing by the VEC itself. At the commercialization stage, private venture capital performs the central contribution, but a backup for this in the funding aspects--such as introducing low-interest financing from public organizations or VEC suretyship obligations--has been proposed. In the latter half of the commercialization stage and thereafter, the need will arise for adjustment of the assistance apportionment between the Smaller Business Investment Advancement Corporation and private venture capital.

Secondly, a strengthening of the support system in numerous aspects besides funding must be hastened. According to a questionnnaire survey conducted by the VEC. "The Present State of the Research and Development Industry", desires were insistently voiced for : 1) information exchanges and interchanges between unusual businesses, 2) technology transfer (joint development), and 3) establishment and intervention of public organizations for personnel mediation, among other things. The "Survey of the Actual State of Venture Business," conducted by the VEC in mid-December, was aimed at building a data bank on a nationwide scale, and applications for studies of concrete policies are anticipated.

Figure 5 Venture Business Financing Demand Curve, and Advancement and Promotion Policy



Key:

1. Amount of funds needed
2. Startup
3. Risk, labor, sponsor
4. Self-financing
5. Financing by VEC suretyship obligations
6. Investment from venture capital
7. Public offering of stock on over-the-counter market
8. Investment by Smaller Business Investment Advancement Corp.
9. Public offering of stock on securities exchange
10. Bank financing
11. Research & Development Stage
    1) Function strengthening of VEC
    *Enlargement of suretyship obligations framework
    *Direct financing
    2) Establishment of new venture capital as matter of policy
12. Commercialization stage
    1) Enactment of Research & Development Industry Investment Promotion Law (investment association registration system)
    *preferential tax measures
    *Applicable exclusion from Anti-Trust Law
    *Investment insurance system
    2) Introduction of VEC suretyship obligations in venture capital
    3) Low-interest financing from public organization for venture capital
13. Expansion stage
    1) Reform of over-the-counter market
    *Relax registration standards
    *Reform market functions (new shares issued at market price)
    *Relax regulations of securities companies
    2) Relax exchange listing standards

Source: Compiled by NRI based on various data

The policies for the advancement and promotion of venture business are widespread among the sections in charge of policy and timespan; in addition policy details are spread out in many branches--from radical system reform to the upgrading of honest functions. Comprehensive, systematic, and well-timed policy implementation is desired.

12256
CSO: 4105/102

ECONOMIC

STRENGTH OF JAPANESE INDUSTRY ANALYZED

Tokyo KINYU TO GINKO in Japanese 15 Dec 82 pp 105-109

[Article by Haruo Mikuni, representative director of Mikuni Office and a certified analyst of U.S. stocks: "'Technological Creativity' in the Spotlight--Secret of the Strength of Japanese Industry Revealed in U.S.-Japan Comparison"]

[Excerpt] Technological Development Capability Supports Japanese Corporate Profits

The firmness of Japanese corporate profits becomes noticeable when compared with the present state of corporate profits in other foreign countries, particularly the United States. The favorable export situation in assembly/processing industries can be pointed out as a strong support of Japanese corporate profits. Moreover, the past image of "cheap and trashy" goods has completely changed, and it is now possible to set prices reflecting the high quality of finished products. The truth of the matter is that not only has Japan's technological level rapidly closed the gap with the U.S.-European level, but in certain limited fields, Japan is creating its own technology.

Furthermore, Japanese industries lead the world in high growth rate and have been able to supply a tremendous amount of products to the Japanese market, which is an enormous consumer market second only to the United States. Heretofore, Japan was also able to export, practically at will, to the largest market--namely, the United States. Thus, with the two huge U.S. and Japanese market available, Japanese industries were able to lower costs through mass production. From the standpoint of corporate finances, it can be said that the increase in corporate profits was sustained by the two factors of setting prices that reflected the high quality of finished goods and of lowering costs through supplying the two big markets, the United States and Japan.

Recently, with regard to ordinary and convertible bonds, the regulations covering the issuance of unsecured debentures have been reassessed, and as a result, the number of companies permitted to issue unsecured bonds has increased. For underlying factors, one can point to the soundness of corporate profits and the improvement in financial status resulting

from capital increases wich had been active up until last year. Also, with the change to stabilized growth, it has become apparent that business trust is upheld by business profits; in case commercial enterprises fail because of a big downturn in demand, one can speculate that the mortgage value of the factories and the factory sites would greatly diminish.

Table 1. U.S.-Japan Comparison of Net-Worth Ratio

Year	Japan	U.S.
1969	22%	55%
1975	17	54
1980	21	50

Source: Bank of Japan's "Comparative International Statistics"

In analyzing the present status of Japan's business finances, two points merit attention. First, can Japan continue its technological development and, moreover, can Japanese industries maintain the capability, through the buildup of creative technology, to set prices that reflect the quality of its finished products? Second, can Japan secure the export markets of advanced countries, primarily the United States, and continue the mass production of goods, especially those developed through new technologies?

In actuality, these two factors are closely related. Not only does the creation of new technologies, products, and industries increase employment at home, but by setting up production facilities overseas, Japanese enterprises can establish new industries and create new employment. If Japan follows this course, the increase of exports during the early stages of a new industry would expedite the establishment of mass production facilities and lay the firm foundation for the new industry. The 13 November 1982 issue of the London ECONOMIST reports that a restriction of imports of high-technology Japanese goods by U.S.-European nations would only worsen their own technological lag and is not the proper action to take. While establishing new industries by providing on a worldwide basis the new products most desired by the world's consumers, Japan must give economic consideration to starting production abroad as soon as the capability for mass production has been developed to a certain extent, and thereby preserve the principle of free overseas trade.

Age of Leading the World in Creative Technology

With the advanced countries of Europe and the United States as its model, Japan rapidly modernized. It is not an exaggeration to say that all policies were focused on this goal. By catching up with the U.S.-European level, Japanese economic society increased productivity and thereby raised its standard of living.

Since the Japanese people themselves are industrious and excel in learning ability, the acquisition of U.S.-European technology had a direct link with economic merits. This development increased the Japanese admiration of Americans and Europeans and intensified the desire to imitate U.S.-European culture and technology. In any field, if there is a model, an attempt to imitate it is the starting point of creativity. If one recalls how golfing and skiing skills are acquired, one realizes how reckless it would be to try to develop one's own technique without going through the process of imitation.

It is not strange in Japan's educational system, emphasis has been placed on the absorption of knowledge, while the development of individuality has been considered useless and harmful. Even in enterprises, the trend has been to emphasize the introduction of technology rather than the development of one's own technology.

With the rising technological standard of Japanese products, however, the mounting difficulty in importing U.S. technolgoy has become a big problem, because the U.S. side has come to regard Japan as a strong competitor. In view of this situation, it is becoming increasingly urgent for Japan to assume the role in the future of independently developing its own technological creativity.

Through the gains stemming from the high growth rate, Japan has obtained the economic strength to bear the risk of developing technological creativity. Moreover, Japan's capability for such development has grown to the extent that there are indications of an aggressive desire from overseas to make investments. In a number of fields demanding creative technology, the initiative in the most advanced technological sectors is shifting from the United States to Japan. Therefore it can be readily imagined that in the future, would expectations for technological creativity will be focused more and more on Japan.

For Japan, measuring up to these expectations would not only contribute to overcoming the worldwide recession but might be a necessity for [this country] itself because of its reliance on trade.

Overseas, there exists something called venture capital, which provides and uses investment funds for new technological developments. These investors are strongly counting on the possibility of industrializing Japan's creative technology.

Venture capital is provided by investment firms that assume the extremely high risk of providing funds to industrialize new breakthroughs in technological development and recover the capital only when the industrialization succeeds. It is a field in which it is considered good if one investment in about 10 succeeds. The one successful investment leads to a public offering of stocks and brings enormous capital gains to the investors.

When questioned as to how they select investment targets, venture capitalists give interesting answers. First, enterprises that possess technological creativity are selected as investment targets. Second, the creative technology must satisfy market needs--i.e., it must have great potential for industrialization. Third, entrepreneurs must be thoroughly familiar with the market. Fourth, the possibility is high that societies with diversified and flexible value perceptions will evolve new needs. The foregoing are common answers given by venture capitalists.

Then, why do venture capitalists find Japan's creative technology appealing? Three points are discussed, in order, below:

Japan Far Surpasses the United States in Quality of Goods

The first point is that Japan has practically mastered the most advanced phase of existing U.S.-European technology.

How should Japan's advanced technology be assessed internationally? The image created overseas by Japanese technology is that of special features such as "miniaturization," "precision," etc., as represented by transistor radios, electronic calculators, small-size color TV sets, motorcycles, compact four-wheelers, cameras, video equipment, etc.

However, U.S. technology was imported for the basic materials--such as semiconductors, plastics, etc.--needed to manufacture these products, and to begin with, sciences--including physics, chemistry, mechanical engineering, etc.--were introduced from Europe and United States. As a result, there is a tendency to believe that Japanese technology consists only of the know-how to assemble miniature, precise components through dexterity, and that the basic technology in its entirety was imported from Europe and United States.

Is this really true? Actually, Japan's capability in this area is far greater than is generally believed. The reason is that Japanese enterprises concentrated their efforts on new markets which could not be covered by U.S. enterprises. Japan is becoming far superior to the United States in the quality of goods sent to new markets. In the developmental capability to create basic technology, Japan outstrips the United States and is bracing to take over the U.S. market.

This development can be seen in the transition of research and development expenditures. When the U.S.-Japanese ratio of R&D expenditures to GNP is examined, it can be seen that, with the mid-1960's as the peak, the U.S. ratio has been declining, whereas Japan's is on the rise. In the beginning, when Japanese enterprises were engrossed in importing U.S. and European technology, it was readily possible to ascertain Japanese R&D projects by referring to U.S. and European achievements.

Table 2. U.S.-Japanese GNP Ratio of R&D Expenditures

	1961	1965	1970	1975	1980	1981
Japan	N/A	1.34	1.64	1.97	2.07	2.19
U.S.	2.74	2.90	2.63	2.27	2.33	2.35

Note: Compiled from "Survey Report of Scientific and Technological Research" (1981) by the Statistics Bureau, Prime Minister's Office, COJ; source materials of the U.S. National Science Foundation; etc.

At present, however, when Japan is promoting its own R&D in order to produce creative results, it must decide for itself in which fields and on what subjects it should conduct research, and it must expend for R&D much more enormous sums of money than heretofore. In the past, there was a considerable difference between the United States and Japan in the ratio of R&D expenditures to GNP, but in 1981 the gap narrowed, and it now is so close that it might be reversed in the near future.

Grasp Market Needs and Secure Price-Setting Capability

The second point is that Japanese industries are securing the capability to set prices. This is because Japanese enterprises are beginning to grasp market needs and provide the products to satisfy those needs.

Technological capability makes it possible to maintain sale prices at a steady level and to lower costs. In Japan, the former is called nonprice-competitive power, and the latter, price-competitive power. In the relatively early period, mention was made of "price competition." It was said that since costs were cheap, it was possible to sell by lowering prices. However, after the oil crisis, "nonprice competition" began to be mentioned--i.e., the possibility of making sales on the basis of quality and special features rather than discounted prices.

During the "price competition" age, Japan did not have the power to set prices, and even if the products were the same, unless prices were always 20 to 30 percent lower than those of the top U.S. and European manufacturers, Japan had difficulty finding customers. Therefore, Japan made an all-out effort to cut production costs so as to survive the price war. Quality control and rational investments are the end results.

However, the so-called popular myth of "Japanese-style management" can be used to expalin "price-competitive power" but not "nonprice-competitive power." It should be pointed out that, at present, the relative weight of "nonprice-competitive power" is increasing as a factor supporting the Japanese economy. "Nonprice-competitive power" is peculiar in that it provides new products that meet market needs, and as a result it does not start a price war with existing products. Of course, high technology is needed to create new products, but even more important is the ability to recognize market needs. It is relatively easy to produce goods that will satisfy newly identified needs.

Let us take the electronics field as an example. U.S. electronics manufacuturers have concentrated on military and industrial markets. These are markets which place greater demands on performance than on cost. The military's market needs are not exacting. The situation might be different if a war were actually going on, but weapons which might or might not be really used are being manufactured and there is no price competition.

The possibility is slim that U.S. electronics manufacturers that have not been hardened in the highly competitive and demanding civilian marketplace can develop the capability in the future to compete with Japanese manufacturers that are survivors of the civilian price war. When these various factors are compared, it seems only natural that Japan will continue to hold the initiative in the electronics field.

Japanese Value Perceptions in Product Development Being Reassessed

Third, it is claimed that new needs evolve from changes in value perceptions. The trend is shifting from adoration of U.S.-European cultures and sense of values to a reassessment of Japan's own culture and value judgements. Meanwhile, products satisfying Japanese value perceptions are being sought.

In 1958, Taizo Ishida, then president of Toyota Motor Co., Ltd., wrote in his work, "My Curriculum Vitae," that in the near future, two types of automobiles will be desired: large cars that are adapted to the fine and splendid highways of the United States, and cars that have low gas consumption and are suitable for bad roads. The latter compacts were considered the cars for Toyota's market.

Today, more than 20 years later, Japanese compact cars have monopolized the international market. Even in the United States, at the time, medium-size cars labeled compacts began to draw attention, but as a fundamental concept, Americans did not sense the need for cars with low gas consumption. Therefore, even to this day they are not able to market a truly compact car. Japanese studied the U.S. automobile industry, which was the world's finest; but as for products, however, [the Japanese] did not imitate but instead, grasping market needs, created the field of new compact cars.

Furthermore, although it entered the automotive industry late, Honda Motor Co.,Ltd. was able to establish the position it holds today because when it entered the field in the 1960's, it had the foresight to see the need to develop front-engine/front-drive systems, power steering for easier driving, automatic transmission, etc., to make compact cars better.

Then how is it possible to perceive market needs? The answer is to grasp the value perceptions of the market. In the automobile industry, as for development of compact cars, the reason for the U.S. lag and Japanese lead lies in how gasoline was regarded--i.e., as a commodity that could be wasted or as a commodity to be treasured.

There is a big difference internationally in gasoline prices. In the United States, because gasoline taxes are held at a very low leve, gasoline prices are only onehalf to onethird those in other countries. Therefore, there is no strong realization that gasoline consumption must be restricted. On the contrary, in Japan, which depends on imports for practically all of its oil, R&D on engines and on making cars smaller and lighter has progressed in order to conserve gasoline.

Judging from the trend of Japan's corporate finances, it appears that in the future, because of active technological developments, the high level of corporate profits should fundamentally continue, although there will be some fluctuations owing to changing business conditions. Enterprises possessing the world's top-level technological standards are expected to make new investments aggressively, utilizing not only their own abundant capital but also funds actively acquired through the issuance of shares or bonds in the capital market, where they are supported by high inve ment ratings.

That being the case, the most important task is to resolutely resolve the problem of economic frictions so that the export channels for Japan's most advanced technological products will always be open. Possession of high-tech capability strengthens Japan's economic position, but on the other hand it makes it necessary for Japan to prevent countries abroad from changing to protectionist trade by positively liberalizing its own internal market. It should be recalled that both the United Kingdom and the United States had to make the same choice when they held the economic leadership.

9134
CSO: 4105/101

ION EXCHANGE MEMBRANE PATENT STRUGGLE DISCUSSED

Tokyo ZAIKAI TEMBO in Japanese New Year's Special Issue, 1983, pp 78-79

[Article by Haruo Yoshida]

[Text] The mercury process for manufacturing caustic soda must be converted to some other method by the end of 1984. Against this background, a struggle between Asahi Chemical and Asahi Glass is developing over a "patent infringement problem" related to the ion exchange membrane process, and there is no knowing its outcome.

Caustic soda is usually manufactured from salt by means of electrolysis, and there are three known processes: the mercury process, the asbestos disphragm process, and the ion exchange membrane process. The present patent infringement problem arose as a result of the government's decision to ban the use of the mercury process by the end of 1984 as a link in the countermeasures aimed at combating pollution. Japan's soda industry received a heavy blow at that time, because the mercury process was the main method of manufacturing caustic soda in Japan. Nevertheless, by March 1976, nearly two-thirds of the mercury process production capacity had been converted to the diaphragm process. And today, when the date at which the mercury process will be banned completely is drawing nearer, a "patent war" is intensifying over the ion exchange membrane process, which is considered to be the definitive version characterized by pollution-free and energy-conserving features.

To trade this patent war from its beginning, in 1967 Ashai Chemical began to undertake the development of the ion exchange membrane process. By March 1974, it had filed a basic patent application with the Patent Office which made it public in January 1980. Thereupon overseas markers, including Du Pont of the United States and Bayer of West Germany, as well as domestic makers including Ashai Glass, Tokyuama Soda, Toyo Soda, and Kanebuchi Chemical, protested the validity of this patent on the ground that "it is a technology based on a commonly known technology." This is the first stage of the dispute.

The patent war over the ion exchange membrane process was intensified by the ruling of the Patent Office, which rejected the protest made by many makers and approved Asahi Chemical's patent application in July 1982. Having received a favorable ruling on its patent application from the Patent

Offi , on 29 September Asahi Chemical formally brought suit against Asahi Glass at the Tokyo district court for a temporary disposition concerning "discontinuation of soda production at its Kansai and Chiba plants using th ion exchange membrane process, discontinuation of sales of iron exchange membranes, and discontinu on of the construction of a plant by Tsurumi Soda which is undertakin e construction of an electrolytic tank using an ion exchange m brane manufactured by Asahi Glass."

To the makers that protested, this action literally "poured oil on the fire," and as expected, on 4 November Asahi Glass filed a suit at the Patent Office requesting nullification of the patent on the basis of Patent Law No 123, stating that "Asahi Chemical's patent on the ion exchange membrane process is based on a commonly known technology." As a result, this patent war over the ion exchange membrane process is to be unfolded with the Tokyo district court and the Patent Office as the stages. It is expected to be a protracted war, and there is no knowing what will come out of it.

Numerous Merits of Ion Exchange Membrane Process

Let us describe briefly the ion exchange membrane process developed by Asahi Chemical. The process utilizes a special ion exhcnage membrane made from a flourine compound. As shown in the diagram, a sodium ion (positive) of salt (sodium chloride) passes through the membrane and combines with a hydroxy ion (negative) on the other side of the membrane to form sodium hydroxide, or caustic soda. With this ion exchange membrane process, not only is there no worry whatsoever about countermeasures for the treatment of mercury and asbestos, as exists with the mercury process and the diaphragm process, but also it is highly energy efficient. For example, the total energy, including electricity and steam, required by the mercury process to produce 1 ton of caustic soda amounts to 3,225 DC-kWh; 3,270 DC-hWh for the diagphragm process; and only 2,450 DC-kWh, or approximately 75 percent, for the ion exchange membrane process. The true reason for the present patent war lies in the fact that the ion exchange process is superior not only to the mercury process but also to the diaphragm process. That is, since the mercury process must be abandoned by the end of 1984, those plants using the mercury process will naturally convert to using the ion exchange membrane process, but many plants had converted from the mercury process to the diaphragm process in the past may be expected to convert again to the ion exchange membrane process in the future.

Moreover, the prevailing view among industry circles is that almost all processes for the electrolysis of salt, except for one developed by Du Pont in which a special kind of membrane is employed, will infringe upon Asahi Chemical's patent if Asahi Chemical's ion exchange membrane process is to be granted a patent eventually. So, if Asahi Chemical were to take action against other makers demanding compensation for the damages or to stop sales, its impact on other makers would be incalculable. In the background

of the protest made by the makers here and abroad against Asahi Chemical's patent application and the petition filed by Asahi Glass to nullify approval of this patent looms this grave problem.

Needless to say, the insecurity of other makers itself is an advantage to Asahi Chemical. The domestic caustic soda production capacity is said to be 220,000 tons by the ion exchange membrane process, 3 million tons by the diaphragm process, and 1.6 million tons by the mercury process. It is expected that not only the mercury process but also the diaphragm process will be converted to the ion exchange membranc process in the future. Estimating on the basis of a simple calculation that approximately 7 billion yen will be needed to convert a facility having an annual production capacity of 100,000 tons to use of the ion exchange membrane process, a total investment of 112 billion yen will be needed to convert all facilities using the mercury process today to use of the ion exchange membrane process. The investment can be reduced to approximately one-half by utilizing the existing usable equipment such as the electric equipment, but the new investment still comes to 50 billion yen. In addition, the "life" of the ion exchange membrane is relatively short--2 years. Therefore, after selling the facilities, Asahi Chemical will be able to continue to enjoy the sales of ion exchange membranes over an extended period.

"Market Monopoly Strategy" With Patent As Weapon

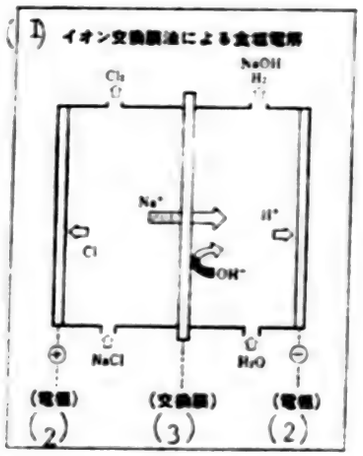
The vast overseas market should not be forgotten either. The world's caustic soda production capacity today is said to be 42 billion tons annually, and conversion to the ion exchange membrane process is expected to take place worldwide in the future just as is happening in Japan. Although there are powerful rivals such as Du Pont and Bayer overseas, Asahi Chemical has already established similar patents in the United States, England, France, and Canada, and it has also exported its technology or facility to a number of manufacturers, including Prince Albert Pulp of the United States, Aczo Zaut Hemmi of Holland, and N.Z. Forest Products and Tasman Pulp and Paper of New Zealand.

Moreover, taking into consideration the fact that ion exchange membrane technology is not only useful in the production of caustic soda but also potentially useful in a wide range of applications, including electrolytic reduction of uranium, desalinizationof sea water, and concentration of sea water for the purpose of salt-making, it is not an overstatement to say that Asahi Chemical is in possession of a "goose that lays golden eggs."

In the midst of a movement to reform the industrial structure on a global scale, "transition from general type to special type" and "development of commodities with high added value" are considered the strategy for survival by many industrial circles, including the fiber and petrochemical industries. Needless to say, more technological renovations will be necessary in the future. The true picture of Asahi Chemical's operation strategy as manifested in this patent war can be understood better taking into consideration that Asahi Chemical is an enterprise supported by the

two fields--fibers and petrochemical--in which this is most evident. In fact, Heber [phonetic] House, which represents the housing department of Asahi Chemical, brought charges against Yamato House last year for patent infringement. Although this dispute was settled amicably, Yamato House was forced to change part of its housing construction process.

Asahi Chemical's operational strategy revealed through these patent wars related to Heber House and the ion exchange membrane process, or a form of market monopoly using a patent as a weapon, is common practice among American enterprises. Asahi Chemical, which has been ridiculed for operating a "hoggish business practice" because it used to jump at anything that appeared profitable, may emerge as an American type enterprise with this patent war as a turning point.



KEY: (1) Electrolysis of salt by means of ion exchange membrane process
(2) Electrode
(3) Exchange membrane

9113
CSO: 4306/126

ELECTRIC COMPANIES' FY-82 SEMIANNUAL SETTLEMENT REPORTED

Tokyo ENERUGI FORAMU in Japanese 83 pp 75-78

[Text] The intermediate FY-82 accounts for the nine power companies have been drawn up. The abnormal water shortage and the low yen rate which persisted from the start of the year, along with the cool summer which played havoc with any expansion in demand, comprised a triply adverse situation under which the present settlements were drawn up, and this is directly tied to the problem of whether electrical-use rates can be raised. Thus, the present intermediate accounts are of great interest even from a social standpoint.

The present settlement of accounts may be described simply as a small increase in income and a large decrease in profits (Hokkaido along showed increased income and increased profits because of rate adjustment), which basically reflects a trend toward a worsening balance, yet all nine companies declared about 10 percent distributions.

With the exception of Hokkaido and Shikoku, none of the other companies will be able to meet an annual distribution of 10 percent from the present profits, and assuming this present situation continues, they will have to dig into the carryover profits from the preceding year, a separate reserve fund, or accumulated profits if the 10 percent distribution is to be made at the end of the year.

The outline and features of the present accounts situation will be discussed below.

Small Increase in Income, Large Decrease in Profit

The sales of the nine power companies for the intermediate period of FY-82 totaled 5.5216 trillion yen, which represented a slight increase of 3.1 percent over the preceding year, but the business profits amounted to only 178.8 billion yen, a 46.8 percent decrease from the preceding year.

Looking at the business of each individual company, except for Hokkaido Power--which saw the rate increase imposed in October 1981 contribute fully toward this year's profits, enabling this company to realize both increased income and increased profits--the decrease in profits picture saw Hokuriku Power lead the list with an 83.2 percent decrease in profits compared to the previous year,

followed by five companies--Chugoku Power, Kwansai Power, Tohoku Power, and Chubu Power--all of which showed more than a 50 percent decrease in profits while the remaining three power companies--Tokyo, Kyushu, and Shikoku--showed a decrease in profits from 30 percent to 10 percent.

This situation is the result of the long continuing industrial inactivity and the cool summer which caused power demand to settle at just about last year's level (Hokkaido, Hokuriku, and Shikoku showed minus demand compared to the previous year) so that income from power services showed only a tiny increase, in addition to which the cheaper yen and water shortage increased the cost of fuel, while payments for continuing capital items such as depreciation and interest payments increased substantially.

The power sales of the nine power companies totaled 225.3 billion kilowatt-hours, an increase of only 1.0 percent over the previous year. The electrical fees for this power consumption totaled 5.2928 trillion yen, which was 2.4 percent more than for the same period the year before. The income after inclusion of other income totaled 5.5576 trillion yen, representing the slight increase of 3.0 percent over the preceding year.

There was some decrease in running costs due to decreases in repairs, but capital costs and fuel costs combined to bring the total operating cost to 5.3788 trillion yen, which was 3.6 percent over that of the preceding year.

As a result, the business profits of the nine power companies was 178.8 billion yen, representing a tremendous decrease of 45.8 percent from the preceding year, and even the intermediate profits after taxes showed a decrease of 37.2 percent from the previous year to 91.1 billion yen.

Primary Cause of Worsening Situation Is Capital Costs

The contents of the FY-82 intermediate accounts are compared with those of the preceding year to show the various expense items and how they contribute to increased disbursements in Table 1. This table shows that the greatest contributor to this worsening balance was capital costs (depreciation and interest payments). It can be said that capital costs were responsible for 63 percent of this worsening balance.

The second factor responsible for this deterioration was fuel costs which contributed 44.9 percent. Where repair costs were concerned, comparison of the absolute sum with the previous year resulted in a minus value, so that there was a minus effect in its degree of contribution to the worsening trend and it worked toward improving the balance. Combined, the contriubtions of capital costs and fuel costs to the worsening situation totaled more than 100 percent, and it can be said that these two factors were responsible for the declining balance.

In the accounts for the preceding year, FY-81 fuel costs ranked first among the factors contributing to a declining balance, contributing 41.6 percent of the decline, while second place went to capital costs (33.7 percent contribution rate); there was a reversal in the first and second rank factors this fiscal year.

Table 1. Contribution of Various Costs to the Worsening Balance (Million Yen)

(1)項目		57年度中間期 (2)	56年度中間期 (3)	前年同期比 57中間/56中間 (4)	構成比 57中間 (5)	悪化率寄与率 (%) (6)
収	電灯料 (8)	15,422	15,201	101.5	28.7	
(7)	電力料 (9)	37,506	36,506	102.7	69.7	
	(小 計) (10)	(52,928)	(51,707)	(102.4)	(98.4)	
	その他収入 (11)	880	802	109.7	1.6	
入	合 計 (12)	53,807	52,509	102.5	100.0	
支	人件費 (14)	4,598	4,318	106.5	8.7	15.2
(13)	燃料費 (15)	18,689	17,864	104.6	35.3	44.9
	修繕費 (16)	3,910	4,086	95.7	7.4	Δ 9.5
	支払利息 (17)	5,625	5,082	110.7	10.6	63.1
	減価償却費 (18)	5,671	5,054	112.2	10.7	
	渇水準備金 (19)	218	406	—	0.4	Δ 13.7
出	その他 (20)	14,639	14,248	102.6	27.7	
	(原子燃料再処理積立金) (21)	(180)	(—)	(—)	(0.4)	
	合 計 (12)	52,896	51,059	103.6	100.0	100.0

(22) (注) 1 (原子燃料再処理積立金) はその他の内数である。
2 9社間での融通電力の購入電力料を除く。

Key:

1. Item
2. FY-82 intermediate period
3. FY-81 intermediate period
4. Ratio (82/81)
5. Constituent ratio for 1982
6. Contribution to worsening rate (%)
7. Income
8. Lighting fees
9. Power fees
10. Subtotal
11. Other income
12. Total
13. Disbursements
14. Manpower costs
15. Fuel costs
16. Repair costs
17. Interest disbursements
18. Depreciation
19. Water shortage emergency fund
20. Other
21. (Nuclear fuel reprocessing security fund)
22. (Note) 1. (The nuclear fuel reprocessing security fund) comes under the other category
    2. Power purchased between zones of the nine power companies not included

Looking now at the capital costs, which was the primary factor for this worsening balance of various companies, it can be seen that Hokkaido Power, which saw its income increase favorably as the result of a rate increase, expanded its range of declining depreciation (in the past, the declining rate method was

applied only to the machine equipment of power plants, but it was decided to place all structures except machinery of all facilities and power distribution lines in the declining rate category). Tokyo Power has no special depreciation fund, but the depreciation costs for the Fukushima No 2 power plant's No 1 unit, which went into operation in April, were included. Depreciation costs were newly included for the No 2 unit of the Ikata nuclear power plant of Shikoku Power, which initiated operation in March, among the items which stand out. On the other hand, three companies--Tohoku Power, Chubu Power, and Kwansai Power--showed very small increases in depreciation, and their balances seemed to be rather good.

Nuclear Power Exploits Its Strength

The second major worsening factor was fuel costs, but this showed a scant 4.6 percent increase over the previous year despite the sharp, broad loss in yen value from the start of the period. The yen dropped from its value during the same period of the previous year (237.03 yen/dollar) by 25.57 yen (the average exchange rate during the first half of FY-82 was 252.60 yen/dollar). If this rate could be directly reflected in the fuel costs, then the fuel bill would have been 180-190 billion yen, which would have represented an increase of 10 percent over the preceding year. The fact that this increase in fuel costs was rather limited may have been the result of this increase in costs having contributed to limiting the decrease in balance despite the declining trends seen in the present accounts.

Looking at the background of this small increase in fuel costs, the devaluation of the yen and the water shortage (96.6 percent) were the factors for which increasing fuel costs compensated by the high operating rate of nuclear power plants.

Looking at the Kyushu Power system, the facility utilization rate of nuclear power plants during the first half of the year was 73.6 percent (including Japan Atomic Power power generation), a rather high rate. Nuclear power delivered 52.7 billion kilowatt-hours, which was an increase of 29.0 percent over the same period last year, and even 12.2 percent more than the planned level.

Except for Chugoku Power, the other five nuclear power generating companies all were conducting planned repairs and periodic inspections during the latter part of the period, and this may have been responsible for the good results; they seem to have somehow overcome the troubles which continued for 3-4 years starting about 1975 and to have attained stable operation.

When the reduction in fuel costs resulting from this high operating rate of nuclear power plants is calculated, the value becomes roughly 130 billion yen compared to the same period of the previous year, and about 63 billion yen according to the plan. There is a feeling that the power of an operating nuclear power plant can be vividly seen. In this regard, a 1 percent increase in the operating rate of a nuclear power reactor amounts to a saving of about 18 billion yen in fuel costs.

When this record is examined for the various power companies, the contribution of nuclear power becomes even more clear. First of all, the Hokkaido, Tohoku, and Hokuriku power companies, which do not have nuclear power plants, all showed double-digit-level increases in fuel costs over the preceding year (11-17 percent). Chugoku Power experienced a low operating rate of 27.6 percent as the result of periodic inspection complications, and it too showed a double-digit increase in fuel costs over the previous year of 12 percent. The increase in fuel costs of the other small companies was extremely small. Shikoku Power and Kyushu Power actually spent less for fuel than the preceding year (Shikoku; 29 percent decrease; Kyushu; 8.5 percent decrease).

The total repair costs for all nine companies represented a minus figure compared to the previous year. The electric power industry is one in which it is not possible to effect a large reduction in repair costs on a short term accounting, and it is possible to evaluate the business condition of a company by inspecting its trends in repair costs. The power companies which recorded minus repair costs compared to the previous year were Tokyo (18.7 percent decrease), Chubu (1.7 percent decrease), Hokuriku (19.9 percent decrease), and Kyushu (3.1 percent decrease). Among these, Tokyo Power and Hokuriku Power displayed considerable decreases, and these may be considered repair cost reductions with strong overtones of a so-called well-needed haven from the standpoint of income and outgo measures.

Subjects Which Emerged From This Accounting

A scrutiny of the Fy-82 intermediate accounts shows a number of problems revealed by these figures.

The first subject is the worsening trend of the underlying base.

The second is the force of nuclear power generation. The fact that the large increase in the cost of fuel of 25.57 yen over the preceding year due to the devaluation of the yen could be overcome is attributable to the strength of nuclear power generation. That is to say, the economic feature of nuclear power was exploited as it was supposed to be. Nuclear power generation actually should be a factor responsible for the third subject--increasing trend in capital costs--but it appears that the reduction in fuel costs brought about by nuclear power greatly exceeded the increase in capital costs associated with nuclear power.

The third subject is the trend to increasing capital costs. This trend is a major subject for the electric power business during a period in which little increase in demand is seen.

The actual situation is that this increase in capital costs was brought about by the development of substitute energy centered on nuclear power to enable disengagement from dependence on oil, or stabilization of the cost structure, and is the result of the electric power business strategy to convert the unstable fuel costs to so-called stable capital costs, and it is a problem for the business how much the consumer understands this point. This is also a question which society asks of efforts to cut down costs in line with the compression in capital cost.

The fourth item is the trend toward an increasing difference in operating levels between the various companies. It is only natural that differences in demand structure based on the background of regional economics and in the power source structure will create differences in the income/outgo situation, but this trend toward increasing differences becomes a subject which society in general may have to approve.

This is believed to be a major problem. For example, the income unit for the first half of FY-82 showed a range between the upper and lower limits of these companies of 3.07 yen per unit for lighting use and 4.05 yen per unit for power use (excluding Hokkaido Power).

The yen-versus-dollar exchange rate has been moving toward a stronger position for the yen since the FY-82 intermediate accounting. The companies are quoting exchange rates for the second half period averaging 265 yen/dollar (Tokyo) or 260 yen/dollar (Kwansai) for their accounting, and are pointing to greater latitude in business practices as a result.

At the present time, the exchange rate seems to be moving along a base of 250-255 yen average rate, and the overall situation will be a higher yen rate than each company anticipated. Despite this situation, seven power companies, excluding Hokkaido Power and Shikoku Power, may have to dip into specially accumulated funds or interest revolving funds if they are to pay out 10 percent distributions at the end of the year.

It is expected that the business operations for the second half of the year, including the carryover into FY-83, will be extremely difficult. In this sense, FY-82 may well turn out to be the initial year of conversion to a low-growth road.

Table 2. Major Business Indicators (100 Million Yen, %)

(1) 会社名	(2) 売上高		(3) 経常収益		(4) 経常費用		(5) 経常利益		(6) 中間純利益(税引後)	
	57年度中間期 (7)	前年同期比 (8)	57年度中間期 (7)	前年同期比 (8)	57年度中間期 (7)	前年同期比 (8)	57年度中間期 (7)	前年同期比 (8)	57年度中間期 (7)	前年同期比 (8)
(9) 北海道	(2,056) 2,070	(120.7) 120.7	2,083	120.6	1,948	114.3	134	61.2	70	—
(10) 東北	(4,630) 5,013	(103.1) 103.1	5,087	103.5	4,883	110.6	204	40.9	124	61.8
(11) 東京	(16,884) 17,454	(102.9) 103.9	17,499	103.8	17,039	105.1	460	71.4	307	84.9
(12) 中部	(7,697) 7,985	(101.1) 101.0	8,019	100.8	7,773	104.2	246	49.8	125	52.6
(13) 北陸	(1,610) 1,708	(100.0) 101.5	1,728	101.2	1,696	112.3	323	16.4	34	57.8
(14) 関西	(9,307) 9,714	(100.8) 101.1	9,764	101.1	9,496	106.0	268	33.2	117	36.1
(15) 中国	(3,895) 4,218	(100.8) 103.4	4,286	103.6	4,205	108.9	81	29.6	62	41.2
(16) 四国	(1,893) 2,029	(100.1) 104.3	2,050	103.7	1,911	105.2	139	87.3	78	94.1
(17) 九州	(4,956) 5,026	(100.9) 100.8	5,061	103.6	4,838	102.4	222	72.8	93	52.2
(18) 合計	(52,928) 55,216	(102.4) 103.1	55,576	103.0	53,788	106.2	1,788	54.2	911	62.8

(19) (注) 売上高の上段( )は料金収入である。

Key:

1. Name of company
2. Total sales
3. Ordinary profit
4. Ordinary expenses
5. Ordinary profit
6. Intermediate profit (after taxes)
7. Intermediate period, FY-82
8. Ratio to same period last year
9. Hokkaido
10. Tohoku
11. Tokyo
12. Chubu
13. Hokuriku
14. Kwansai
15. Chugoku
16. Shikoku
17. Kyushu
18. Total
19. (Note) The upper figure of sales ( ) is the income for use fees

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